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Before the

Federal Communications Commission

Washington, D.C. 20554

In the Matter of	)	
	)	
Advanced Television Systems	)	
and Their Impact Upon the	)	MM Docket No. 87-268
Existing Television Broadcast	)	
Service	)	

TO: The Commission

KERN EDUCATIONAL TELECOMMUNICATIONS CONSORTIUM (KETC)

REPLY COMMENTS ON THE SIXTH

NOTICE OF PROPOSED RULE MAKING

Summary

The Kern Educational Telecommunications Consortium ("KETC") is the applicant for a new non-commercial educational television ("NCETV") television station on Channel *39, Bakersfield, California. The Federal Communications Commission ("Commission") granted a waiver of the "freeze" on applications for new television stations by the commission on July 10, 1996 (see exhibit #2), and completed the commission's cutoff date of August 16, 1996. Furthermore, the application was deemed "grantable" by the commission on January 13, 1997 pending NTIA/PTFP funding (see exhibit #3). The Commission file number is BPET-960328KM. KETC plans on beginning contruction of NCETV Channel 39 by October 1997.

KETC urges consideration for a DTV allocation for the following reasons:

1. NCETV Channel *39 is eligible for DTV channel allocation under conditions proposed in the Sixth Further Notice Of Proposed Rule Making[1], since an application[2] was on file before October 24, 1991.

2. The Commission's database indicated NCETV Channel *39 as a pending application in 1996. The Association for Maximum Service Television, Inc. ("MSTV") "Broadcasters' Proposed ATV Allotment/Assignment Approach" filed in reference to FCC Docket 87-268 in 1995, requested ATV channel allotment 54 be assigned to NCETV Channel *39 in Bakersfield, California.

3. KETC's Consulting Engineers, Hammett & Edison, have concluded that DTV Channel 38 could be allocated as the DTV channel to the proposed NTSC Channel *39 in Bakersfield. (please see exhibit #1)

4. KETC believes it is in the public's interest to allocate Channel *39 a DTV channel. Granting of this request will provide Bakersfield's **only** local NCETV service.

5. KETC believes this request conforms to the Sixth Further Notice Of Proposed Rule Making and follows the principles of full accommodation for all eligible existing broadcasters, replication of existing broadcast service areas, and sound spectrum management, and it uses the technical and interference characteristics of the ATSC DTV Standard.

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[1] See Sixth Further Notice Of Proposed Rule Making at para. 9. The Commission clarified that all parties with applications for a construction permit on file as of October 24, 1991 who are ultimately awarded full-service broadcast station licenses would be eligible for a DTV channel allocation.

[2] Original application filed by Community Television of Southern California on December 12, 1988, (FCC File No. BPET-881012KE and competing application filed by Valley Public Television on September 09, 1990 (FCC File No. BPET-90090KE).

1. KETC background

The Kern Educational Telecommunications Consortium (KETC), the applicant, is a consortium of California public educational agencies formed pursuant to the attached Join Powers Agreement under the California Government Code. The consortium members are Kern High School District, Kern County Superintendent of Schools, Kern Community College District, Bakersfield City School District, Panama-Buena Vista Union School District and California State University, Bakersfield. Please see Exhibit #4 for a complete description of KETC, its evolution, mission and educational purpose.

2. NCETV Channel *39 is eligible for DTV channel allocation

Under conditions proposed in the Sixth Further Notice Of Proposed Rule Making[3], an application was on file before October 24, 1991. The original application filed by Community Television of Southern California on December 12, 1988, (FCC File No. BPET-881012KE) and competing application filed by Valley Public Television on September 09, 1990, (FCC File No. BPET-90090KE). While the original applications were dismissed under a Joint Petition for Approval of Settlement Agreement (93M-480) on July 19, 1993, the agreement permits both applicants to re-file within a five year period. Therefore, this kept the channel *39 allocation active in the Commission's database.

3. The Commission's database

The Commission's database indicated NCETV Channel *39 as a pending application in 1996. Subsequent meetings with the Commission's Mass Media Bureau in July 1996, pertaining to the KETC ATV "freeze" wavier, also indicated that Channel *39 was still under consideration for an ATV allotment. Furthermore, the Association for Maximum Service Television, Inc. ("MSTV") "Broadcasters' Proposed ATV Allotment/Assignment Approach" filed in reference to FCC Docket 87-268 in 1995,

[3] See Sixth Further Notice Of Proposed Rule Making at para. 9. The Commission clarified that all parties with applications for a construction permit on file as of October 24, 1991 who are ultimately awarded full-service broadcast station licenses would be eligible for a DTV channel allocation.

requested ATV channel allotment 54 be assigned to NCETV Channel *39 in Bakersfield, California.

The Commission has recognized that "Bakersfield is one of the largest communities in the country without off-the-air noncommercial educational television service."[4] Bakersfield, California is allocated Channel *39 in section 73.606 of the Federal Communications Commission rules. The Commission stated "our previous finding regarding the public interest factors warranting utilization of Channel *39 in Bakersfield remains valid."[5] Therefore, KETC would suggest that the "same findings" by the Commission will also support a DTV channel allocation, if the proposed channel allocation meets the objectives, conditions, and regulations outlined in the Sixth Notice of Proposed Rule Making.

4. Engineering studies conclude that DTV Channel 38 will work

KETC's Consulting Engineers Hammett & Edison have concluded that DTV Channel 38 could be allocated as the DTV channel to the proposed NTSC Channel *39 in Bakersfield. (please see exhibit #1). KETC believes the report follows the principles of full accommodation for all eligible existing broadcasters, replication of existing broadcast service areas, sound spectrum management, and it uses the technical and interference characteristics of the ATSC DTV Standard. Furthermore, Bakersfield, California requires "special consideration" by the Commission, since Bakersfield is protected by extensive terrain shielding. The Commission has reckoned these "special considerations" and granted KETC the ATV waiver based upon the terrain shielding arguments. Therefore, due to terrain shielding, Hammett & Edison has concluded that DTV Channel 38 will pose no interference to other DTV or NTSC channels.

5. KETC believes it is in the public's interest

Granting of this request will provide Bakersfield with its **only** local NCETV service. KETC's main intent is to provide a valuable educational service to the community and meet a variety of educational, informational, and entertainment needs that

[4] Complete Text is found in exhibit #2
[5] Ibid.

are not currently met. Compelling reasons exist to allocate Channel 39 a DTV channel. By allocation of a DTV channel, KETC will have the opportunity to provide the **first** local over-the-air noncommercial educational television service to 120,663 people in the F(50, 50) 64 dBu Bakersfield area and 451,973 people in terrain-sensitive 64 dBu area[6]. A substantial portion of the Bakersfield population do not have access to public, educational television programming, and the Bakersfield area has no locally originated noncommercial educational television service. Indeed, Bakersfield is the largest community in the United States without noncommercial educational television service (482,652 persons, with an estimated 164,900 television households) and is one of the few urban areas of its size without a Grade B signal from any noncommercial educational station.[7] Furthermore, KETC can begin NTSC NCETV service immediately, and use the same equipment in the transition to DTV. All equipment purchased will accommodate both analog NTSC and DTV. Clearly, the public will benefit with DTV channel allocation 38, as the DTV transition cost will be minimal. KETC feels this is a logical approach, and meets the objectives outline in the Sixth Further Notice Of Proposed Rule Making.

6. CH 38 DTV allocation conforms to the Sixth Further Notice Of Proposed Rule Making

KETC believes this request conforms to the Sixth Further Notice Of Proposed Rule Making and follows the principles of full accommodation for all eligible existing broadcasters, replication of existing broadcast service areas, sound spectrum management, and it uses the technical and interference characteristics of the ATSC DTV Standard.

Respectfully Submitted,
Kern Educational Telecommunications Consortium

Larry Ciecalone, General Manager
1300 17th Street
Bakersfield, California 93301-4533
Phone (805) 636-4755 Fax (805) 636-4656

[6] Engineering study completed by Dane Ericksen, Hammett and Edison, March 14, 1996

[7] Bakersfield is also the largest area in the State of California without over-the-air reception of public television; approximately 25 percent of the State's unserved population live in this region. See Public Broadcasting Coverage in the United States, U.S. Department of Commerce, NTIA (1989), page 49

Exhibit #1

Engineering Exhibit
(Support for DTV channel allocation for
Bakersfield, California.)

Kern Educational Telecommunications Consortium

Engineering Exhibit in Support of Reply Comments to the Sixth Further Notice of Proposed Rulemaking to MM Docket 87-268 (DTV Table of Allotments)

January 23, 1997

HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

Kern Educational Telecommunications Consortium
Reply Comments to MM Docket 87-268
Sixth Further Notice of Proposed Rulemaking

Statement of Dane E. Ericksen, Consulting Engineer

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Kern Educational Telecommunications Consortium to prepare an engineering exhibit in support of Reply Comments to the Sixth Further Notice of Proposed Rulemaking to MM Docket 87-268 (DTV Table of Allotments).

Background Information

The Kern Educational Telecommunications Consortium ("Consortium") is the applicant for a new non-commercial educational television ("NCETV") station on Channel 39, at Bakersfield, California. The proposed new National Television Systems Committee ("NTSC") Channel 39 station is within 280.8 kilometers of Los Angeles, one of the Advanced Television ("ATV") "freeze" cities. However, a waiver of the ATV freeze was granted by the Consortium on July 10, 1996.* The basis for this waiver included the facts that grant of the NTSC Channel 39 application would provided Bakersfield's first local NCETV service, and that massive terrain obstruction exists between the proposed transmitter site at Mt. Adelaide and the Los Angeles basin.

NTSC Channel 39 for Bakersfield, California, Should Be Retained in NTSC Table of Allotments

NTSC Channel 39 was not shown in the tentative DTV Table of Allotments proposed in the Sixth Further Notice of Proposed Rule Making to MM Docket 87-268 ("Sixth FNPRM") as one of the Bakersfield NTSC TV stations assigned a matching DTV channel. This is undoubtedly because as of October 24, 1991, no construction permit or station license for the vacant Bakersfield NCETV NTSC Channel 39 allocation existed. However, because the Commission has now determined that the public interest would be served by granting the above-referenced waiver to the ATV freeze, it then follows that NTSC Channel 39 at Bakersfield should be retained in the NTSC Table of Allotments, should receive a matching DTV allotment, and should be entitled to protection from other new DTV allotments, as well as from protection from modifications to existing NTSC stations.

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* July 10, 1996, letter from Ms. Barbara A. Kreisman, Chief, Video Services Division, Mass Media Bureau, to Kern Educational Telecommunications Consortium.

Kern Educational Telecommunications Consortium
Reply Comments to MM Docket 87-268
Sixth Further Notice of Proposed Rulemaking

DTV Channel Availability and Coverage

In the Sixth FNPRM, the FCC proposed tentative DTV channels and power levels for all NTSC stations in existence as of October 24, 1991. Based on that tentative Table of DTV Allotments, I conclude that DTV Channel 38 could be allocated as the DTV channel assigned to the proposed NTSC Channel 39 at Bakersfield. Allocation conditions for DTV Channel 38 are shown in the attached Figure 1.

DTV Channel 38 at Bakersfield would have two short-spacings: one to DTV Channel 38, tentatively assigned to Station KDOC-TV, NTSC Channel 56, Anaheim, California, and the other to an NTSC Channel 38 allocation for Santa Barbara, California. With regard to the KDOC-TV DTV Channel 38 short-spacing, no actual interference would be caused or received because of the extensive terrain shielding between Mt. Adelaide and the Los Angeles basin; indeed, it was the recognition of this massive terrain obstruction that resulted in the FCC granting a waiver of its ATV freeze to allow acceptance of the Consortium's NTSC Channel 39 application. The exhibits demonstrating the magnitude of that terrain obstruction, included in the Consortium's NTSC Channel 39 application, will therefore not be repeated here.

The Santa Barbara NTSC Channel 38 allocation is also not of concern for two reasons: 1) the FCC's database indicates that allotment is scheduled for deletion, and 2) even if the allotment were to remain, there is also massive terrain shielding between Mt. Adelaide and Santa Barbara, which would again preclude any actual interference from being caused or received.

DTV Power for NTSC Service Replication

A DTV Channel 38 effective radiated power ("ERP") of 182 kW would result in replication of the proposed NTSC Channel 39 coverage. The proposed NTSC and DTV facilities and coverages would be as follows:

	NTSC	DTV
Channel	39	38
Effective Radiated Power	2,820 kW peak visual	182 kW average
Antenna	Andrew Type ATW-C3-25H8 "cardioid" at 260°T with 2° electrical beam tilt	
Site	35° 25' 47" N 118° 44' 56" W (NAD27)	
Effective Heights	1,091 m AMSL = 52 m AGL = 429 m HAAT	

From this data, the coverages and populations that would be served would be as follows:

	Terrain-Sensitive Coverage Truncated by Grade B Contour
NTSC F(50,50) 64 dBu	457,482 persons
Figure 2A	10,457 sq. km
DTV F(50,90) 43.8 dBu	462,917 persons
Figure 3A	10,727 sq. km

These figures are based on the protocol defined in the Sixth FNPRM: namely, each facility's terrain-sensitive coverage, as truncated by the NTSC Grade B coverage based on the conventional FCC F(50,50) curves. The attached Figure 2 shows the NTSC Channel 39 coverage, and the attached Figure 3 shows the proposed DTV Channel 38 coverage.

Summary

NCETV Channel 39 for Bakersfield, California, should be retained in the NTSC Table of Allotments. DTV Channel 38 could be allocated as the corresponding DTV channel for the proposed NTSC Channel 39 facilities. A DTV power level of 182 kW ERP would result in replication of the proposed NTSC service.

List of Figures

In carrying out these engineering studies, the following attached figure was prepared under my direct supervision:

1. Allocation conditions for DTV Channel 38 at Mt. Adelaide
2. Proposed NTSC Channel 39 terrain-sensitive coverage map and terrain & coverage tabulation
3. Proposed DTV Channel 38 terrain-sensitive coverage map and terrain & coverage tabulation.

Dane E. Ericksen, P.E.

REGISTERED PROFESSIONAL ENGINEER
DANE E. ERICKSEN
No. 11654
Exp. 9-30-00
ELECTRICAL
STATE OF CALIFORNIA

January 23, 1997

Affidavit

State of California
County of Sonoma
ss:

Dane E. Ericksen, being first duly sworn upon oath, deposes and says:

1. That he is a qualified Registered Professional Engineer, holds California Registration No. E-11654 which expires on September 30, 2000, and is employed by the firm of Hammett & Edison, Inc., Consulting Engineers, with offices located near the city of San Francisco, California,

2. That he graduated from California State University, Chico, in 1970, with a Bachelor of Science Degree in Electrical Engineering, was an employee of the Field Operations Bureau of the Federal Communications Commission from 1970 to 1982, with specialization in the areas of FM and television broadcast stations and cable television systems, and has been associated with the firm of Hammett & Edison, Inc., since October 1982,

3. That the firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Kern Educational Telecommunications Consortium to prepare an engineering exhibit in support of Reply Comments to the Sixth Further Notice of Proposed Rulemaking to MM Docket 87-268 (DTV Table of Allotments),

4. That such engineering work has been carried out by him or under his direction and that the results thereof are attached hereto and form a part of this affidavit, and

5. That the foregoing statement and the report regarding the aforementioned engineering work are true and correct of his own knowledge except such statements made therein on information and belief and, as to such statements, he believes them to be true.

Dane E. Ericksen, P.E.

Subscribed and sworn to before me this 23rd day of January, 1997

LINDA SIEMER
Comm. # 1099501
NOTARY PUBLIC - CALIFORNIA
Sonoma County
My Comm. Expires June 2, 2000

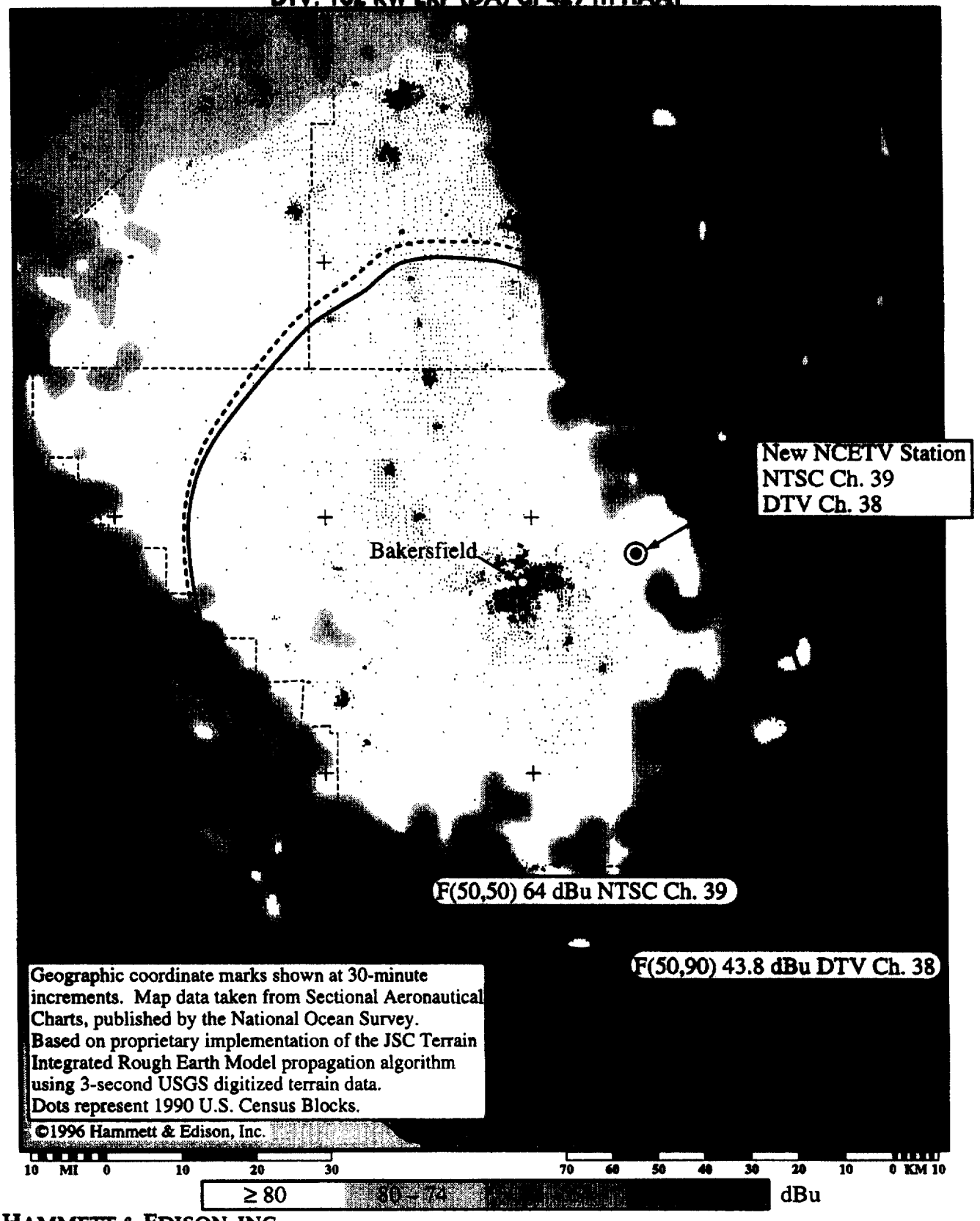
Kern Educational Telecommunications Consortium
Reply Comments to MM Docket 87-268
Sixth Further Notice of Proposed Rulemaking

DTV Channel 38 Allocation Conditions
(for Proposed New NCETV NTSC Channel 39 Site, Mt. Adelaide)
(35° 25' 47" N, 118° 44' 56" W)

Channel	Relationship	Call Sign	Status	Location	Required Distance	Actual Distance
23	N–15	KERO-TV	Lic.	Bakersfield, CA	<24.1 or >96.6 km	9.7 km
24	N–14	KSEE	Lic.	Fresno, CA	<24.1 or >96.6 km	153.7 km
30	N–8	KZKI	Lic.	San Bernardino	<24.1 or >96.6 km	168.0 km
31	N–7	KVMD	Lic.	Twentynine Palms	<24.1 or >96.6 km	273.1 km
33	N–5	KADE	Lic.	San Luis Obispo	<24.1 or >96.6 km	173.4 km
34	N–4	KMEX-TV	Lic.	Los Angeles, CA	<24.1 or >96.6 km	147.4 km
35	N–3		Alloc.	Barstow, CA	<24.1 or >96.6 km	167.6 km
36	N–2		Alloc.	Land Mobile, LA	<24.1 or >96.6 km	159.5 km
37	N–1		Alloc.	P. Penasco, Mexico	<9.7 or >88.5 km	665.5 km
38	*N*		*Alloc.*	*Santa Barbara, CA*	*>244.6 km*	*141.4 km*
39	N+1		App.	Bakersfield, CA	<9.7 or >88.5 km	0.0 km
40	N+2	KTBN-TV	Lic.	Santa Ana, CA	<24.1 or >96.6 km	147.8 km
41	N+3		Alloc.	Ridgecrest, CA	<24.1 or >96.6 km	99.8 km
42	N+4		Alloc.	Santa Maria, CA	<24.1 or >96.6 km	162.4 km
43	N+5	KGMC	Lic.	Clovis, CA	<24.1 or >96.6 km	153.7 km
45	N+7	KUZZ-TV	Lic.	Bakersfield, CA	<24.1 or >96.6 km	1.3 km
46	N+8	KHSC-TV	Lic.	Ontario, CA	<24.1 or >96.6 km	147.3 km
52	N+14	KVEA	Lic.	Corona, CA	<24.1 or >96.6 km	147.7 km
53	N+15	KAIL	Lic.	Fresno, CA	<24.1 or >96.6 km	192.4 km
37D	N–1		DTV		<32.2 or >88.5 km	>200.0 km
38D	*N*	*KDOC-TV*	*DTV*	*Anaheim, CA*	*>223.7 km*	*167.9 km*
39D	N+1		DTV		<32.2 or >88.5 km	>200.0 km

New NCETV Station • NTSC Channel 39 • Bakersfield, California

FCC Coverage Contours for NTSC Channel 39 and DTV Channel 38 plus Terrain-Sensitive NTSC Channel 39 Coverage
NTSC: 2,820 kW ERP (DA) at 429 m HAAT
DTV: 182 kW ERP (DA) at 429 m HAAT



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

970124
Figure 2A

New NCETV Station • NTSC Channel 39 • Bakersfield, California

Terrain and Coverage Data

Azimuth	Average Elevation[1] (3 to 16 km)	Antenna Height Above Average Terrain[2]	Angle to Radio Horizon[3]	Effective Radiated Power[4]	Distance to Contours[5] 77 dBu	Grade A 71 dBu	Grade B 56 dBu
0°T	803 m	288 m	0.47°	22.22 dBk	33.4 km	42.0 km	56.5 km
5	833	258	0.44	21.39	30.9	39.3	53.5
10	945	146	0.33	18.24	20.6	28.0	41.7
15	1,041	50	0.20	14.61	9.5	13.2	24.4
20	1,052	39	0.17	13.15	7.6	10.7	19.8
25	937	154	0.34	15.41	17.8	25.0	38.4
30	749	342	0.51	17.38	28.6	37.3	52.4
35	722	369	0.53	16.43	28.2	37.0	52.3
40	902	189	0.38	12.87	16.9	24.1	37.4
45	1,096	-5[6]	0.00	23.19	12.0	17.4	29.8
50	1,219	-128[6]	0.00	23.54	12.2	17.8	30.2
55	1,266	-175[6]	0.00	24.35	12.8	18.8	31.3
60	1,309	-218[6]	0.00	25.21	13.4	19.8	32.5
65	1,375	-284[6]	0.00	25.93	14.0	20.6	33.5
70	1,448	-357[6]	0.00	26.50	14.5	21.3	34.3
75	1,499	-408[6]	0.00	26.82	14.8	21.7	34.7
80	1,514	-423[6]	0.00	26.96	14.9	21.9	34.9
85	1,395	-304[6]	0.00	26.82	14.8	21.7	34.7
90	1,259	-168[6]	0.00	26.50	14.5	21.3	34.3
95	1,150	-59[6]	0.00	25.93	14.0	20.6	33.5
100	1,118	-27[6]	0.00	25.21	13.4	19.8	32.5
105	1,036	55	0.21	10.40	7.8	11.0	20.3
110	974	117	0.30	11.46	12.0	17.4	29.9
115	935	156	0.35	12.04	14.3	21.1	33.9
120	905	186	0.38	12.81	16.7	23.8	37.1
125	864	227	0.42	14.47	20.7	28.2	41.9
130	816	275	0.46	16.45	25.1	33.2	47.4
135	791	300	0.48	18.13	28.2	36.6	51.2
140	759	332	0.50	19.73	31.5	40.4	55.4
145	724	367	0.53	20.99	34.7	43.8	59.3
150	633	458	0.59	22.46	40.0	49.6	66.4
155	548	543	0.65	23.92	45.0	54.9	72.5
160	520	571	0.66	24.42	46.5	56.5	74.6
165	494	597	0.68	25.01	48.0	58.2	76.9
170	456	635	0.70	25.59	49.8	60.2	79.6
175	416	675	0.72	26.08	51.5	62.1	82.1
180	365	726	0.75	26.59	53.4	64.2	85.1
185	341	750	0.76	26.90	54.5	65.3	86.7
190	335	756	0.76	27.11	55.0	65.9	87.4
195	335	756	0.76	27.28	55.3	66.2	87.8
200	333	758	0.76	27.46	55.6	66.6	88.3
205	320	771	0.77	27.71	56.3	67.4	89.4
210	307	784	0.78	27.95	57.0	68.1	90.5
215	295	796	0.78	28.20	57.7	68.9	91.5

New NCETV Station • NTSC Channel 39 • Bakersfield, California

Terrain and Coverage Data

Azimuth	Average Elevation[1] (3 to 16 km)	Antenna Height Above Average Terrain[2]	Angle to Radio Horizon[3]	Effective Radiated Power[4]	Distance to Contours[5] 77 dBu	Grade A 71 dBu	Grade B 56 dBu
220°T	292 m	799 m	0.78°	28.40 dBk	58.1 km	69.3 km	92.1 km
225	287	804	0.79	28.59	58.6	69.8	92.8
230	277	814	0.79	28.80	59.2	70.4	93.7
235	271	820	0.79	28.97	59.6	70.9	94.4
240	270	821	0.79	29.10	59.8	71.2	94.8
245	267	824	0.80	29.20	60.1	71.5	95.1
250	265	826	0.80	29.28	60.3	71.7	95.4
255[7]	263	828	0.80	29.34	60.4	71.9	95.6
260	256	835	0.80	29.39	60.6	72.1	96.0
265	243	848	0.81	29.43	61.0	72.5	96.6
270	225	866	0.82	29.47	61.4	73.0	97.4
275	213	878	0.82	29.46	61.6	73.3	97.8
280	222	869	0.82	29.33	61.2	72.8	97.1
285	255	836	0.80	29.05	60.0	71.5	95.1
290	306	785	0.78	28.66	58.3	69.5	92.3
295	347	744	0.76	28.30	56.8	67.9	89.9
300	376	715	0.74	27.98	55.7	66.6	88.1
305	397	694	0.73	27.69	54.7	65.5	86.6
310	439	652	0.71	27.28	53.1	63.7	84.1
315	472	619	0.69	26.92	51.7	62.2	82.0
320	471	620	0.69	26.74	51.4	61.9	81.6
325	517	574	0.66	26.32	49.7	59.8	78.8
330	587	504	0.62	25.74	46.7	56.7	74.4
335	654	437	0.58	25.13	43.5	53.1	70.2
340	714	377	0.54	24.53	40.5	49.7	65.5
345	760	331	0.50	23.96	37.7	46.6	61.8
350	799	292	0.47	23.11	34.8	43.4	58.1
355	825	266	0.45	22.31	32.5	41.0	55.3
Average[8]	662	429					

1 NGDC 30-second terrain data

2 1,091 m Effective Height minus Average Elevation

3 $0.0277 \sqrt{\text{Height Above Average Terrain}}$

4 Effective radiated power at depression angle to radio horizon. Where radiation at pertinent angle is 90% or more of maximum at given azimuth, maximum radiation is used, in accordance with FCC Rules, Section 73.684(c)(2). See Figure 5 for elevation pattern.

5 FCC Rules, Section 73.699, Figure 10B

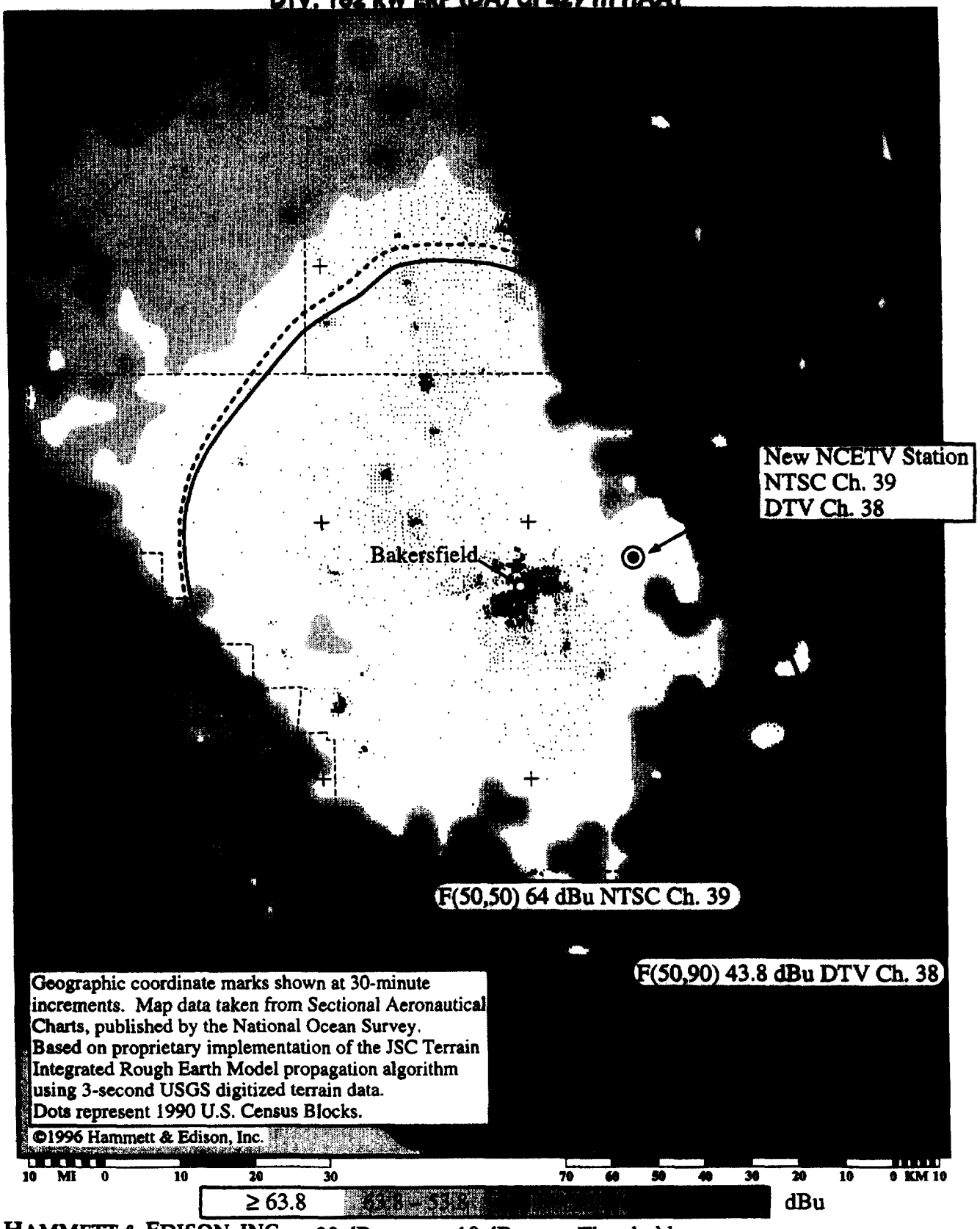
6 Height of 30.5 meters used to project distance to contours

7 Radial through Bakersfield; not included in average

8 Based on 8 standard radials

New NCETV Station • DTV Channel 38 • Bakersfield, California

FCC Coverage Contours for NTSC Channel 39 and DTV Channel 38 plus Terrain-Sensitive DTV Channel 38 Coverage
NTSC: 2,820 kW ERP (DA) at 429 m HAAT
DTV: 182 kW ERP (DA) at 429 m HAAT



HAMMETT & EDISON, INC. + 20 dB + 10 dB Threshold
CONSULTING ENGINEERS
SAN FRANCISCO

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Figure 3A

New NCETV Station • DTV Channel 38 • Bakersfield, California

Terrain and Coverage Data

Azimuth	Average Elevation[1] (3 to 16 km)	Antenna Height Above Average Terrain[2]	Angle to Radio Horizon[3]	Effective Radiated Power[4]	Distance to Contours +20 dB 63.8 dBu	+10 dB 53.8 dBu	Threshold 43.8 dBu
0°T	803 m	288 m	0.47°	10.33 dBk	37.1 km	49.5 km	61.8 km
5	833	258	0.44	9.49	34.8	47.0	59.0
10	945	146	0.33	6.35	25.0	36.8	48.5
15	1,041	50	0.20	2.71	12.0	21.7	32.8
20	1,052	39	0.17	1.25	9.8	17.4	28.3
25	937	154	0.34	3.52	22.3	33.9	45.8
30	749	342	0.51	5.48	32.8	46.2	58.8
35	722	369	0.53	4.53	32.4	46.2	58.9
40	902	189	0.38	0.97	21.4	32.9	44.9
45	1,096	-5[5]	0.00	-3.71	6.6	11.5	20.5
50	1,219	-128[5]	0.00	-3.37	6.7	11.7	20.9
55	1,266	-175[5]	0.00	-2.55	7.0	12.3	21.8
60	1,309	-218[5]	0.00	-1.70	7.3	12.9	22.7
65	1,375	-284[5]	0.00	-0.97	7.6	13.4	23.5
70	1,448	-357[5]	0.00	-0.41	7.9	13.9	24.1
75	1,499	-408[5]	0.00	-0.08	8.0	14.1	24.4
80	1,514	-423[5]	0.00	0.06	8.1	14.3	24.6
85	1,395	-304[5]	0.00	-0.08	8.0	14.1	24.4
90	1,259	-168[5]	0.00	-0.41	7.9	13.9	24.1
95	1,150	-59[5]	0.00	-0.97	7.6	13.4	23.5
100	1,118	-27[5]	0.00	-1.70	7.3	12.9	22.7
105	1,036	55	0.21	-1.50	10.1	17.9	29.3
110	974	117	0.30	-0.44	15.5	26.7	38.6
115	935	156	0.35	0.15	18.5	30.1	41.9
120	905	186	0.38	0.91	21.1	32.7	44.7
125	864	227	0.42	2.57	25.1	37.0	49.0
130	816	275	0.46	4.55	29.5	41.8	54.0
135	791	300	0.48	6.23	32.4	45.1	57.5
140	759	332	0.50	7.83	35.6	48.8	61.2
145	724	367	0.53	9.09	38.6	52.1	64.7
150	633	458	0.59	10.56	43.3	57.4	71.8
155	548	543	0.65	12.02	48.1	62.0	77.2
160	520	571	0.66	12.52	49.2	63.5	79.3
165	494	597	0.68	13.11	50.5	65.1	81.5
170	456	635	0.70	13.69	52.0	67.0	83.8
175	416	675	0.72	14.18	53.5	68.7	86.0
180	365	726	0.75	14.69	55.2	70.6	88.4
185	341	750	0.76	15.00	56.1	71.6	89.7
190	335	756	0.76	15.21	56.5	72.1	90.3
195	335	756	0.76	15.38	56.8	72.3	90.7
200	333	758	0.76	15.56	57.1	72.7	91.1
205	320	771	0.77	15.81	57.7	73.3	92.0
210	307	784	0.78	16.06	58.3	74.0	92.9

New NCETV Station • DTV Channel 38 • Bakersfield, California

Terrain and Coverage Data

Azimuth	Average Elevation[1] (3 to 16 km)	Antenna Height Above Average Terrain[2]	Angle to Radio Horizon[3]	Effective Radiated Power[4]	Distance to Contours +20 dB 63.8 dBu	Distance to Contours +10 dB 53.8 dBu	Distance to Contours Threshold 43.8 dBu
215°T	295 m	796 m	0.78°	16.30 dBk	58.9 km	74.7 km	93.7 km
220	292	799	0.78	16.50	59.3	75.1	94.2
225	287	804	0.79	16.69	59.6	75.5	94.8
230	277	814	0.79	16.90	60.1	76.1	95.5
235	271	820	0.79	17.07	60.5	76.5	96.0
240	270	821	0.79	17.20	60.7	76.7	96.3
245	267	824	0.80	17.31	60.9	77.0	96.6
250	265	826	0.80	17.39	61.1	77.2	96.9
255	263	828	0.80	17.44	61.2	77.3	97.0
260	256	835	0.80	17.49	61.4	77.5	97.4
265	243	848	0.81	17.53	61.7	77.9	97.8
270	225	866	0.82	17.57	62.0	78.4	98.5
275	213	878	0.82	17.56	62.2	78.6	98.8
280	222	869	0.82	17.43	61.8	78.2	98.2
285	255	836	0.80	17.15	60.9	77.0	96.7
290	306	785	0.78	16.76	59.4	75.2	94.3
295	347	744	0.76	16.40	58.1	73.7	92.4
300	376	715	0.74	16.08	57.1	72.6	90.9
305	397	694	0.73	15.79	56.3	71.7	89.7
310	439	652	0.71	15.38	54.9	70.0	87.6
315	472	619	0.69	15.02	53.7	68.6	85.8
320	471	620	0.69	14.84	53.5	68.4	85.5
325	517	574	0.66	14.42	52.0	66.4	82.8
330	587	504	0.62	13.84	49.6	63.5	78.6
335	654	437	0.58	13.23	46.5	60.4	74.8
340	714	377	0.54	12.63	43.9	56.9	70.2
345	760	331	0.50	12.06	41.1	54.0	66.5
350	799	292	0.47	11.21	38.4	50.8	63.1
355	825	266	0.45	10.41	36.2	48.5	60.5
Average[6]	662	429					

1 NGDC 30-second terrain data

2 1,091 m Effective Height minus Average Elevation

3 $0.0277 \sqrt{\text{Height Above Average Terrain}}$

4 Effective radiated power at depression angle to radio horizon. Where radiation at pertinent angle is 90% or more of maximum at given azimuth, maximum radiation is used, in accordance with FCC Rules, Section 73.684(c)(2).

5 Height of 30.5 meters used to project distance to contours

6 Based on 8 standard radials

Exhibit #2

The Federal Communications Commission ("Commission") granted a "freeze" on applications for new television stations on July 10, 1996 to KETC.

Federal Communications Commission
Washington, D.C. 20554

JUL 10 1996

Kern Educational Telecommunications
Consortium
c/o Todd D. Gray
Dow, Lohnes & Albertson
1200 N.H. Avenue, N.W.
Suite 800
Washington, D.C. 20036

Gentlemen:

This is with respect to your March 2, 1996 request for waiver of the "freeze" on applications for new television stations and for acceptance for filing of your application for a new noncommercial educational television station to operate on Channel *39, Bakersfield, California.

The "freeze" was imposed on July 16, 1987, for new television stations within the minimum co-channel separation distances from 30 designated television markets. Advanced Television Systems, Mimeo No.4074(released July 17, 1987). The "freeze" was imposed because the high densities of existing television stations in those markets limited the spectrum available for high-definition television and advanced television ("DTV") service there, and the Commission wanted to preserve its spectrum allocation options for such DTV use. Consequently, all new UHF television proposals for communities within 174.5 miles (280.8 km) of Los Angeles are subject to the "freeze." Since Bakersfield is located 101.0 miles (163.0 km) from Los Angeles and, therefore, within the "freeze" area, you have requested a waiver.

In support of your waiver request, you state that grant of the waiver would enable you to provide a first off-the-air noncommercial educational television service to approximately 120,000 persons in the Bakersfield area. You further note that previously, on July 25, 1990, the Commission granted a waiver of the DTV "freeze" for an application for Channel *39 at Bakersfield. You assert that your proposal is technically similar, if not identical, to the previous waiver granted for Bakersfield.

We have reviewed your request and have determined that, consistent with our previous decision regarding Channel *39 in Bakersfield, your waiver request is justified. See Letter, Chief, Mass Media Bureau, 8940-MMB (July 25, 1990). Your proposal is technically similar to the previous waiver granted for Bakersfield. Moreover, our previous finding regarding the public interest factors warranting utilization of Channel *39 in Bakersfield remains valid. Specifically, Bakersfield is one of the largest communities in the country without off-the-air

noncommercial educational television service. Utilization of Channel *39 would eliminate this situation and bring a first noncommercial educational television broadcast service to more than 120,000 persons.

Accordingly, for the reasons stated, your request for waiver of the DTV "freeze" IS GRANTED, and your application for authority to construct a new noncommercial educational station on Channel *39 in Bakersfield will be accepted for filing in due course. You should be aware, however, that it may be impossible to find an acceptable DTV simulcasting channel for a station operating on this channel.

Sincerely,

Barbara A. Kreisman
Chief, Video Services Division
Mass Media Bureau

Exhibit #3

The CH39 application was deemed "grantable" by the commission on January 13, 1997.

Federal Communications Commission
Washington, D.C. 20554

JAN 13 1997

Kenneth D. Salomon
Dow, Lohnes & Albertson, pllc
1200 New Hampshire Avenue, N.W.
Suite 800
Washington, D.C. 20036

Re: Kern Educational Telecommunications Consortium
Bakersfield, CA
BPET-960328KM

Dear Mr. Salomon:

In connection with an intention to file an FY 1997 Public Telecommunications Facilities Program ("PTFP") application, you have inquired about the status of the above referenced application of Kern Educational Telecommunications Consortium ("Kern") for authority to construct a new noncommercial educational television station on Channel *39, Bakersfield, CA.

Kern's application was placed on a cutoff list specifying a cutoff date of August 16, 1996. No competing applications or petitions to deny were filed by August 16, and no informal objections to Kern's application have been received to date. Kern's application is now available for routine legal and engineering processing. I understand that Kern specified reliance on PTFP funds in its construction permit application, and submitted a funding request during the PTFP's FY 1996 grant round. I also understand that Kern intends to reactivate that request in the PTFP's FY 1997 grant round. Assuming no legal or engineering problems surface with the application, and assuming no informal objections are received, Kern's FCC application is "grantable", providing a financial assistance award is offered by the PTFP.

Sincerely,

Clay C. Pendarvis, Chief
Television Branch
Video Services Division
Mass Media Bureau

Exhibit #4

Complete description of KETC,
its evolution, mission and educational purpose

Exhibit #4

(Nature and Educational Purposes)

Statement of Government Entity

The Kern Educational Telecommunications Consortium (KETC), the applicant, is a consortium of California public educational agencies formed pursuant to the attached Join Powers Agreement under the California Government Code. The consortium members are Kern High School District, Kern County Superintendent of Schools, Kern Community College District, Bakersfield City School District, Panama-Buena Vista Union School District and California State University, Bakersfield.

Statement of NTIA/PFTP Eligibility

The U.S. Department of Commerce, National Telecommunications and Information Administration (NTIA), Public Telecommunications Facilities Program (PTFP) has concluded that the KETC is a special purpose subdivision of a State and would thus be an eligible applicant to the Public Telecommunications Facilities Program (PTFP); See 15 C.F.R. S2301.4 (a) (5) at 56 Fed. Reg. 59176 (November 22, 1991)

KETC Mission Statement

The Kern Educational Telecommunications Consortium (KETC) is established for the purpose of providing, in a cost effective manner, the services and other items necessary and appropriate for the establishment, operation, and maintenance of the Kern Educational Telecommunications delivery system for instructional resources, programming, and equipment; improving education resources; increasing the educational opportunities of students at all instructional levels; improving instructional telecommunications systems and technology; and implementation of recommendations of mutual interest regarding instructional telecommunications delivery systems.

KETC Educational Purposes

Addressing the needs of this diverse area is a high priority for Consortium members responsible for serving this region. It is the objective of KETC to develop public telecommunications systems for the service areas of Consortium members which will empower Consortium members, other community service providers, and citizens by providing them with vibrant instructional and public television offerings dedicated to serving the needs of the area. Public and instructional television as proposed for Channel 39 will open a new educational frontier for all individuals in its coverage area. It not only changes the learning landscape, but it also can provide equal educational opportunities for all citizens in the coverage area, not just those from technically and economically